

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (currently amended) A method of generating a graphical portion of a graphical user interface (GUI), the graphical portion concerning aspects of a storage domain, the method comprising:

illustrating a tree hierarchy and a table portion as a tree-table view;

including, on the tree hierarchy, a node at a first level corresponding to a set of at least two different file systems that are simultaneously displayed and members of the storage domain;

including, on the tree hierarchy, nodes representing users and groups having allocated storage at a second level reporting to the first-level node, each second-level node corresponding to a member of the set of files systems to which the first node corresponds;

including, on the tree hierarchy, nodes at a third level, each third-level node corresponding to storage consumers having allocated storage capacity on the storage domain;

simultaneously displaying, on the table portion, the allocated storage capacity used by the storage consumers of the at least two different file systems; and

toggling between the tree-table view and a table view that shows the storage domain in a table that can be sorted based on attributes to which a column of the table belongs, wherein the storage domain includes a network-attached storage (NAS) device on which the at least two different file systems are mounted.

2. (previously presented) The method of claim 1, wherein each second-level node being a parent to at least one of the third-level nodes.

3. (previously presented) The method of claim 1, wherein each third-level node corresponds to one of an individual consumer or group of consumers using storage capacity on the storage domain.

4. (previously presented) The method of claim 1, further comprising:

including, on the tree hierarchy, nodes at a fourth level;

wherein

each third-level node is a parent to at least one fourth-level node;

each third-level node corresponds to one of a set of instances of storage-consumers and a set of groups of storage-consumers, each group corresponding to instances of storage-consumers, respectively; and

each fourth-level node corresponds to a member of the set to which the parent third-level node corresponds.

5. (original) The method of claim 4, wherein two or more fourth-level nodes correspond to the same entity yet and report indirectly to two or more second-level nodes representing respective file systems.

6. (canceled)

7. (previously presented) The method of claim 1, further comprising:

changing a number of rows in the table portion in response to expanding or collapsing the nodes at the second and third levels in order to show a row corresponding to each node currently displayed in the tree hierarchy.

8. (currently amended) A method of generating a graphical portion of a graphical user interface (GUI), the method comprising:

illustrating a tree-table view having a tree hierarchy portion and a table portion;

including, on the tree-hierarchy portion, nodes representing users and groups having allocated storage corresponding to storage consumers that are members of different file systems having allocated storage capacity on a storage domain;

including, on the table-portion, rows and one or more columns,

the one-or-more columns each representing an attribute, respectively, regarding an allotment of storage space to the respective storage consumers, and

each row being aligned with one of the nodes, respectively, and including cells corresponding to the one or more columns;

simultaneously displaying on the table-portion the allotment of storage space for storage consumers of the different file systems; and

toggling, in response to a user request, between the tree-table view and a sortable table that corresponds to the table-portion, wherein the storage domain includes a network-attached storage (NAS) device on which the different file systems are mounted.

9. (original) The method of claim 8, wherein the attribute is one of:

a soft limit on storage space;

a hard limit on storage space; and

a currently-consumed amount of storage space.

10. (original) The method of claim 9, wherein:

the attribute is a first attribute;

the first attribute is the soft limit; and

the method further comprises

including, on the table-portion, another column representing a second attribute, the second attribute being a size of a grace period in which the soft limit can exceeded.

11. (previously presented) The method of claim 8, wherein the tree-table view and the sortable table are synchronized with respect to each other.

12. (original) The method of claim 11, wherein the sortable table includes all of the rows and the one-or-more columns of the table-portion.

13. (previously presented) The method of claim 8, further comprising:

selecting an icon on the GUI to toggle between the tree-table view and the sortable table.

14. (previously presented) The method of claim 8, further comprising:

changing a number of rows in the table portion in response to expanding or collapsing the nodes corresponding to the storage consumers in order to show a row corresponding to each node currently displayed in the tree hierarchy.

15. (currently amended) A method of generating a graphical portion of a graphical user interface (GUI), the method comprising:

illustrating a tree-table having a tree hierarchy portion and a table portion;

including, on the tree-hierarchy portion, two different file systems, with each of the file systems simultaneously displayed with a node at a first level corresponding to one file system in a storage domain;

including, at a second level on the tree-hierarchy portion, at least one of

a node belonging to a first node-category corresponding to a set of users instances of storage-consumers that are allocated storage space on the storage domain, and

a node belonging to a second node-category corresponding to a set of groups of storage-consumers that are allocated storage space on the storage domain,

each second-level node reporting to the first-level node;

including, on the table-portion, rows and one or more columns,

the one-or-more columns each representing an attribute, respectively, regarding an allotment of storage space to the respective storage consumers, and

the rows being aligned with the first-category and second-category nodes, respectively, and including cells corresponding to the one or more columns;

simultaneously displaying on the table portion the allotment of storage space for storage consumers of the two different file systems; and

toggling, in response to a user request, between the tree-table and a sortable table that corresponds to the table-portion, wherein the storage domain includes a network-attached storage (NAS) device on which the two different file systems are mounted.

16. (original) The method of claim 15, further comprising:

including, on the tree-hierarchy portion, nodes at a third level that report to the first-category and second-category nodes, respectively,

each third-level node corresponding to a member of the set to which the parent first-category or second-category node corresponds, respectively; and

including, on the table-portion, rows that

align with the third-level nodes, respectively, and

include cells corresponding to the one or more columns.

17. (original) The method of claim 16, further comprising:

including, on the tree-hierarchy portion, at least two first-level nodes corresponding to at least two files system in the storage domain; and

including, on the tree-hierarchy portion, a node at a zeroith level representing all instances of file systems in the storage domain,

the zeroith-level node being the parent to each of the first-level nodes.

18. (previously presented) The method of claim 15, wherein the tree-table and the sortable table are synchronized such that a highlighted item remains highlighted in both the tree-table and the sortable table.

19. (currently amended) A computer readable storage medium having instructions for causing a computer to execute a method, comprising:

illustrating a tree hierarchy and a table portion as a tree-table view;

including, on the tree hierarchy, a node at a first level corresponding to a set of at least two different file systems that are simultaneously displayed and members of a storage domain;

including, on the tree hierarchy, nodes at a second level reporting to the first-level node, each second-level node corresponding to a member of the set of files systems to which the first node corresponds;

including, on the tree hierarchy, nodes at a third level, each third-level node corresponding to storage consumers and groups having allocated storage capacity on the storage domain;

simultaneously displaying, on the table portion, the allocated storage capacity used by the storage consumers of the at least two different file systems; and

toggleing between the tree-table view and a table view that shows the storage domain in a table that can be sorted based on attributes to which a column of the table belongs, wherein the storage domain includes a network-attached storage (NAS) device on which the at least two different file systems are mounted.

20. (previously presented) The computer readable storage medium of claim 19, wherein the tree-table view and the sortable table are synchronized with respect to each other.

21. (canceled).

22. (previously presented) The computer readable storage medium of claim 19, further comprising:

changing a number of rows in the table portion in response to expanding or collapsing the nodes at the second and third levels in order to show a row corresponding to each node currently displayed in the tree hierarchy.

23. (currently amended) A computer readable storage medium having instructions for causing a computer to execute a method, comprising:

illustrating a tree-table having a tree hierarchy portion and a table portion;

including, on the tree-hierarchy portion, nodes corresponding to storage consumers and groups that are members of different file systems having allocated storage capacity on a storage domain;

including, on the table-portion, rows and one or more columns,

the one-or-more columns each representing an attribute, respectively, regarding an allotment of storage space to the respective storage consumers, and

each row being aligned with one of the nodes, respectively, and including cells corresponding to the one or more columns;

simultaneously displaying on the table-portion the allotment of storage space for storage consumers of the different file systems; and

toggle, in response to a user request, between the tree-table and a sortable table that corresponds to the table-portion, wherein the storage domain includes a network-attached storage (NAS) device on which the two different file systems are mounted.

24. (previously presented) The computer readable storage medium of claim 23, wherein the attribute is one of:

- a soft limit on storage space;
- a hard limit on storage space; and
- a currently-consumed amount of storage space.

25. (previously presented) The computer readable storage medium of claim 24, wherein:

- the attribute is a first attribute;
- the first attribute is the soft limit; and
- further comprising

including, on the table-portion, another column representing a second attribute, the second attribute being a size of a grace period in which the soft limit can exceeded.

26. (previously presented) The computer readable storage medium of claim 23, further comprising:

selecting an icon on a graphical user interface (GUI) to toggle between the tree-table and the sortable table.

27. (previously presented) The computer readable storage medium of claim 23, wherein the tree-table and the sortable table are synchronized so a highlighted items remains highlighted after toggling between the tree-table and the sortable table.

28. (previously presented) The computer readable storage medium of claim 23 further comprising:

changing a number of rows in the table portion in response to expanding or collapsing the nodes corresponding to the storage consumers in order to show a row corresponding to each node currently displayed in the tree hierarchy.

29. (currently amended) An apparatus for managing aspects of a storage domain, the apparatus comprising:

a host operatively connected to components of the storage domain; and
manager means for running on the host and for managing aspects of the storage domain in part by producing a graphical user interface (GUI); and
generation means for generating a graphical portion of the GUI, the generation means being operable to:

portray, in the graphical portion, a tree hierarchy and a table portion,
portray, on the tree hierarchy, a node at a first level corresponding to a set of at least two different file systems that are simultaneously displayed and members of the storage domain,

portray, on the tree hierarchy, nodes at a second level reporting to the first-level node, each second-level node corresponding to a member of the set of files systems to which the first node corresponds,

portray, on the tree hierarchy, nodes at a third level, ~~the each~~ third-level node representing users and groups having ~~corresponding to a storage consumer~~ having allocated storage capacity on the storage domain,

simultaneously portray, on the table portion, the allocated storage capacity used by the users and groups ~~storage consumer of each~~ of the displayed different file systems, and

toggle, in response to a user request, between the tree-table and a sortable table that corresponds to the table-portion, wherein the storage domain includes a network-attached storage (NAS) device on which the at least two different file systems are mounted.

30. (previously presented) The apparatus of claim 29, wherein each second-level node being a parent to at least one of the third-level nodes.

31. (previously presented) The apparatus of claim 29, wherein the generation means is further operable to change a number of rows in the table portion in response to expanding or collapsing the nodes at the second and third levels in order to show a row corresponding to each node currently displayed in the tree hierarchy.

32. (currently amended) An apparatus for managing aspects of a storage domain, the apparatus comprising:

 a host operatively connected to components of the storage domain; and
 manager means for running on the host and for managing aspects of the storage domain in part by producing a graphical user interface (GUI); and

 generation means for generating a graphical portion of the GUI, the generation means being operable to:

 portray, in the graphical portion, a tree-table having a tree hierarchy portion and a table portion,

 portray, on the tree-hierarchy portion, nodes representing users and groups having allocated storage corresponding to storage consumers that are members of different file systems having allocated storage capacity on a storage domain,

 portray, on the table-portion, rows and one or more columns,
 the one-or-more columns each representing an attribute,
 respectively, regarding an allotment of storage space to the respective storage consumers,
 and

 each row being aligned with one of the nodes, respectively, and
 including cells corresponding to the one or more columns,

 simultaneously portray on the table portion the allotment of storage space for storage consumers of the different file systems, and

 toggle, in response to a user request, between the tree-table and a table view that shows the storage domain in a table that can be sorted based on attributes to which a column of the table belongs, wherein the storage domain includes a network-attached storage (NAS) device on which the two different file systems are mounted.

33. (original) The apparatus of claim 32, wherein the attribute is one of:

- a soft limit on storage space;
- a hard limit on storage space; and
- a currently-consumed amount of storage space.

34. (original) The apparatus of claim 33, wherein:

- the attribute is a first attribute;
- the first attribute is the soft limit; and
- the generation means is further operable to portray, on the table-portion, another column representing a second attribute, the second attribute being a size of a grace period in which the soft limit can exceeded.

35. (previously presented) The apparatus of claim 32, wherein the tree-table and the sortable table are synchronized.

36. (canceled).